Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Revision of Part 15 of the Commission's	)	ET Docket No. 13-49
Rules to Permit Unlicensed National	)	
Information Infrastructure (U-NII)	)	
Devices in the 5 GHz Band	)	

To: The Commission

CONSOLIDATED REPLY OF
THE ALLIANCE OF AUTOMOBILE MANUFACTURERS AND
ASSOCIATION OF GLOBAL AUTOMAKERS

The Alliance of Automobile Manufacturers (the "Alliance")[1] and Association of Global Automakers ("Global Automakers")[2] submit this Consolidated Reply to the Oppositions filed by the National Cable & Telecommunications Association ("NCTA"), the Wireless Internet Service Providers Association ("WISPA"), and others in the above-captioned proceeding.[3] These parties

[1] The Alliance's members include BMW group, Fiat Chrysler Automobiles, Ford Motor Company, General Motors Company, Jaguar Land Rover, Mazda, Mercedes-Benz USA, Mitsubishi Motors, Porsche, Toyota, Volkswagen Group of America, and Volvo Car USA. *See* The Alliance of Automobile Manufactures, *Members*, http://www.autoalliance.org/members.

[2] Global Automakers' automobile manufacturer members include: American Honda Motor Co., Aston Martin Lagonda of North America, Inc., Ferrari North America, Inc., Hyundai Motor America, Isuzu Motors America, Inc., Kia Motors America, Inc., Maserati North America, Inc., McLaren Automotive Ltd., Nissan North America, Inc., Suzuki Motor of America, Inc., and Toyota Motor North America, Inc. Its supplier members include: Delphi Corporation, Denso International America, Inc., Robert Bosch GmbH, NXP Semiconductors USA, Inc., and Sirius XM. *See* Global Automakers, *Our Members*, http://www.globalautomakers.org/members.

[3] National Cable & Telecommunications Association, Opposition to the Association of Global Automakers and the Alliance of Automobile Manufacturers' Petition for Reconsideration, ET Docket. No. 13-49 (June 23, 2016) [hereinafter, *NCTA Opposition*]; The Wireless Internet Service Providers Association, Opposition to the Association of Global Automakers and the Alliance of Automobile Manufacturers' Petition for Reconsideration, ET Docket No. 13-49

ask the Commission to reject the Alliance and Global Automakers' Petition for Reconsideration ("Petition") of the Memorandum Opinion and Order ("*MO&O*"), which modified the Commission's rules to increase by an unacceptable factor of 7,038 the level of out-of-band emissions ("OOBE") that can occur in the 5850-5925 MHz ("5.9 GHz") band.[4] Unless re-examined, this relaxation of the OOBE limits will impair the safety-of-life-and-property benefits, public safety benefits, and other public benefits of Dedicated Short Range Communications ("DSRC").[5]

(June 23, 2016) [hereinafter, *WISPA Opposition*]; Aerohive Networks, Inc., Broadcom LTD, Charter Communications, Inc., Open Technology Institute at New America, Public Knowledge, and Ruckus Wireless, Inc., Opposition to the Association of Global Automakers and the Alliance of Automobile Manufacturers' Petition for Reconsideration, ET Docket No. 13-49 (June 23, 2016) [hereinafter, *Broadcom Opposition*]; Cambium Networks, Ltd., Opposition to the Association of Global Automakers and the Alliance of Automobile Manufacturers' Petition for Reconsideration, ET Docket No. 13-49 (June 23, 2016) [hereinafter, *Cambium Opposition*]; EchoStar Technologies, LLC and Hughes Network Systems, LLC, Opposition to Opposition to the Association of Global Automakers and the Alliance of Automobile Manufacturers' Petition for Reconsideration, ET Docket No. 13-49 (June 23, 2016) [hereinafter, *EchoStar Opposition*]; Dynamic Spectrum Alliance, Opposition to Petition for Reconsideration of Association of Global Automakers, Inc. and Alliance of Automobile Manufacturers, ET Docket No. 13-49 (June 23, 2016) [hereinafter, *DSA Opposition*]; Consumer Technology Association F/K/A The Consumer Electronics Association, Comments to the Association of Global Automakers and the Alliance of Automobile Manufacturers' Petition for Reconsideration, ET Docket No. 13-49 (June 23, 2016); Information Technology Industry Council, Opposition Letter, ET Docket No. 13-49 (June 23, 2016).

[4] *Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*, ET Docket No. 13-49, Memorandum Opinion & Order, at 9 (Mar. 2, 2016); Unlicensed—National Information Infrastructure, Order on Reconsideration, 81 Fed. Reg. 19,896 (Apr. 6, 2016) [hereinafter, *MO&O*].

[5] Association of Global Automakers, Inc. and The Alliance of Automobile Manufacturers, Petition for Reconsideration, ET Docket No. 13-49 (May 6, 2016) [hereinafter, *Petition*]. The Commission may also address the issues raised in the Petition as part of its pending rulemaking. Six weeks after the Petition was filed, the Commission released a Public Notice to refresh the record in this proceeding. *Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*, ET Docket No. 13-49, Public Notice (June 1, 2016) (published 81 Fed. Reg. 36,501 on June 7, 2016) [hereinafter, *Public Notice*]. There is clear overlap between several areas on which the Public Notice seeks comment and the issues raised in the Petition.

The majority of the parties that filed Oppositions failed to address the Petition's merits. Instead, they sought to have it dismissed on procedural grounds. For the reasons set forth below, these objections are unpersuasive and should be rejected. Only one of the Oppositions addresses the substantive points raised in the Petition, but its analysis is flawed and should also be rejected. We reiterate below why the latest OOBE limit rule changes will likely allow harmful interference to DSRC applications, especially latency-sensitive applications, in the 5.9 GHz band.

I. THE PROCEDURAL OBJECTIONS TO THE PETITION ARE BASELESS.

The Oppositions suggest that the Petition should be dismissed because the Alliance and Global Automakers "knew, or should have known," that the Commission would relax the OOBE standards.[6] However, the relaxed OOBE limits allowed by the *MO&O* were derived from a series of *ex parte* submissions—as the Commission itself acknowledges.[7] The Oppositions claim that the Petition should be denied because the Alliance and Global Automakers could have addressed this "proposal" in the fall of 2014 or thereafter.[8]

This line of reasoning is without merit. As the Petition explains, it is a bedrock principle of administrative law that affected parties must be afforded a reasonable opportunity to address and critique matters "of great importance" before their adoption by a federal agency.[9] That simply did not happen here. *There never was a proposal advanced by the Commission or on which the Commission sought comment discussing the standards that emerged in the MO&O*. The

[6] *MO&O*, *supra* note 4, at ¶ 11–14.

[7] *NCTA Opposition*, *supra* note 3, at 3.

[8] *Cambium Opposition*, *supra* note 3, at 5.

[9] *Petition*, *supra* note 5, at 18; *see also, e.g.*, 5 U.S.C. § 553 (b)–(c); *Paulsen v. Daniels*, 413 F.3d 999, 1004–05 (9th Cir. 2007); *U.S. v. Johnson*, 632 F.3d 912, 927–30 (6th Cir. 2012) (noting that an agency's acceptance of post-promulgation comments does not excuse compliance with APA procedures).

proposition that a proposal advanced merely in an *ex parte* submission is sufficient to put other parties on notice of a potential change in a rule or policy that may be implicated by the *ex parte* submission is not now, and never has been, accepted. Adoption of the principle advanced in the Oppositions—that the Petition should be dismissed because one possible outcome may have been suggested in an *ex parte* submission—simply cannot be reconciled with the Administrative Procedure Act ("APA") and cases decided under it.[10]

The Oppositions' argument that the Commission previously considered and rejected the arguments raised in the Petition is also incorrect.[11] The Commission did not analyze in the *MO&O* the potential impact on DSRC of relaxing the OOBE limits as implemented and erred in stating that: "[e]ven with the slight relaxation of the U-NII-3 OOBE limit [adopted in the *MO&O*] . . . the allowed emissions from U-NII devices into the DSRC band will still be held to a lower limit than what was permitted by Section 15.247 prior to the adoption of the *First R&O*."[12] The *ex parte* submissions on which the Commission relied also did not address this issue.[13] As more than one Opposition filing points out, the changes suggested by these submissions were limited to point-to-point devices.[14] Therefore, it was reasonable for parties to believe that any relief the Commission

[10] 5 U.S.C. § 500 *et seq.*; *see also, e.g.*, *Paulsen*, 413 F.3d at 1004–05; *Johnson*, 632 F.3d at 927–30.

[11] *See Broadcom Opposition*, *supra* note 3, at 2; *Cambium Opposition*, *supra* note 3, at 5; *WISPA Opposition*, *supra* note 3, at 4–5.

[12] *See MO&O*, *supra* note 4, at ¶ 15, 16, 23.

[13] *See id.* at ¶ 11–14. Many of the Oppositions either quote or reference this erroneous statement. *See, e.g.*, *NCTA Opposition*, *supra* note 3, at 10; *WISPA Opposition*, *supra* note 3, at 3–4; *EchoStar Opposition*, *supra* note 3, at 4.

[14] *See, e.g.*, *Cambium Opposition*, *supra* note 3, at 3 (noting that one of the *ex parte* submissions as filed "to propose several certification requirements applicable to point-to-point equipment"); *WISPA Opposition*, *supra* note 3, at Technical Statement (explaining that the revised limit is "only relevant to" and "intended for" point-to-point systems).

provided in response to the submissions would be limited to point-to-point devices, which it had previously treated differently than point-to-multipoint devices.[15]

Section 1.429 allows the dismissal of a petition for reconsideration on finality grounds (*i.e.*, where the same arguments and facts set forth in the petition have been considered, analyzed and addressed in writing), but not when the petition seeks reconsideration of a rule derived in some fashion from several *ex parte* statements that have been, at best, only partially noticed and considered.[16] The very purpose of reconsideration is to permit affected members of the public the opportunity to be heard on matters that have not been adequately noticed and considered or for which the consequences were not apparent at adoption. That is exactly what the Petition does. To hold that Section 1.429 bars its consideration would gut the very purpose of the rule and reconsideration and run counter to bedrock administrative law principles.[17] Accordingly, the procedural objections advanced in the Oppositions should be rejected.

II. NONE OF THE OPPOSITIONS ESTABLISH THAT THE FCC'S REVISED OOBE LIMITS ARE SUFFICIENT TO PROTECT DSRC.

The Oppositions almost entirely avoid addressing the Petition's substantive points and technical analysis. Instead, they assert that the Commission's previous OOBE limits were "overly restrictive and very costly to meet" and ignore entirely the consequences of failing to protect DSRC from harmful interference.[18] Plainly, this justification alone cannot serve as a basis for denying the Petition.

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[15] *See, e.g.*, *Paulsen*, 413 F.3d at 1004–05; *Johnson*, 632 F.3d at 927–30.

[16] 47 C.F.R. § 1.429.

[17] *See* 15 U.S.C. § 553. *See also, e.g.*, *Paulsen*, 413 F.3d at 1004–05; *Johnson*, 632 F.3d at 927–30.

[18] *See, e.g.*, *EchoStar Opposition*, *supra* note 3, at 3.

Alone among the Oppositions, the filing by Broadcom Ltd., *et al*. ("Broadcom") attempts to rebut the Petition's technical analysis. Broadcom purports to show that, in the "real[]world," there would only be a "slight" increase of OOBE into the DSRC bands, generally, and into Channel 172 in particular.[19] This assertion is flawed for two reasons. First, it is not "real[]world" or even based on empirical evidence. It simply substitutes more favorable assumptions regarding how equipment manufacturers and operators will respond to the higher OOBE limits than the plain language of the rule (and common sense) would suggest. Broadcom thus engages in sheer speculation—with claims such as "it would be unheard of" and references to "practical engineering constraints"—that are neither measured nor shown to have been validated in the so-called "real world."[20] Indeed, in an effort to preserve scarce financial resources and increase coverage and capacity, one would expect parties deploying point-to-multipoint U-NII-3 equipment to take full advantage of the more relaxed OOBE rules. To assert otherwise is to ignore reality. On the other hand, if no party is expected to take full advantage of the more relaxed U-NII-3 OOBE limits, then there should be no significant negative consequences for the U-NII-3 band stakeholders of reducing those limits to a reasonable level to protect 5.9 GHz DSRC from interference.

Second, apparently recognizing the thinness of its substantive argument, Broadcom suggests that "[t]he automakers could simply relocate operations planned for DSRC Channel 172 to the top of DSRC band."[21] In one short sentence, Broadcom not only demonstrates callous indifference to the potential for harmful interference, but recommends as a solution a rule change that would clearly set back DSRC deployment (and the tremendous safety benefits generated

[19] *Broadcom Opposition*, *supra* note 3, at 6.

[20] *Id.* at 8, 9.

[21] *Id.* at 11.

thereby) by several years.[22] Certainly nothing in the Commission's recently released Public Notice supports such an action,[23] and the record in this proceeding is already replete with evidence of the dramatic, negative consequences such a change would have on DSRC roll-out.[24] "Re-channelization" is but one approach to sharing in the 5.9 GHz DSRC band that the Commission has sought comment on.[25] The Commission has never expressed a preference for it and, in fact, has many good reasons for selecting an alternative approach. For example, as the Alliance and Global Automakers have discussed in previous filings and will explain in greater detail in their upcoming comments, the "detect and vacate" approach is far superior because it would minimize the risk of harmful interference to safety-of-life DSRC applications, would not require a redesign of DSRC equipment and applications, and would not require additional time-consuming and expensive testing.[26]

Moreover, in evaluating assertions that the previous OOBE limits for U-NII-3 devices were "overly restrictive" or "costly to meet," the Commission should consider the fact that at least some companies that plan to deploy U-NII-3 devices also deploy U-NII-1 or U-NII-2 devices.[27] The Commission's OOBE limits for U-NII-1 and U-NII-2 devices are even stricter than the OOBE

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[22] *Petition*, *supra* note 5, at 9. *See generally* U.S. Government Accountability Office, *Intelligent Transportation Systems: Vehicle-to-Infrastructure Technologies Expected to Offer Benefits, but Development Challenges Exist*, GAO-15-775 (Sept. 2015).

[23] *Public Notice*, *supra* note 5, at 7–9.

[24] *Petition*, *supra* note 5.

[25] *Public Notice*, *supra* note 5, at 6–7.

[26] *See, e.g.*, Letter from David Schwiertert, Executive Vice President, the Alliance, to Marlene H. Dortch, Secretary, FCC, ET Docket No. 13-49 (June 2, 2016). Comments in response to the Public Notice are due July 7, 2016.

[27] *See, e.g.*, *EchoStar Opposition*, *supra* note 3, at 3.

limits that applied to U-NII-3 devices prior to the *MO&O*.[28] Specifically, the OOBE limit for U-NII-1 and U-NII-2A devices is -27 dBm/MHz outside of the 5150-5350 MHz band, and there is no -17 dBm/MHz allowance within 10 megahertz of the band edge.[29] Similarly, the OOBE limit for U-NII-2C devices is -27 dBm/MHz outside of the band.[30]

Finally, the sentiment expressed in many of the Oppositions—that the Commission should not worry about this issue until it is found to cause harmful interference to DSRC operations—is highly problematic.[31] Future equipment, including non-802.11 U-NII devices, can be expected to take advantage of the relaxed OOBE limits to cut design and deployment costs. Additionally, math and physics demonstrate the high likelihood of interference to DSRC—not only on Channel 172, but throughout the 5.9 GHz DSRC band. It is thus a matter of when, not if, the Commission's relaxed OOBE limits will result in harmful interference to DSRC.

[28] *See, e.g.*, *Petition*, *supra* note 5, at 11-17; 47 C.F.R § 15.407(b).

[29] *See* 47 C.F.R. § 15.407(b).

[30] *See id.*

[31] *See, e.g.*, *DSA Opposition*, *supra* note 3, at 3.

III. CONCLUSION.

The Alliance and Global Automakers' Petition is procedurally proper and should be considered on its merits. We respectfully request that the Commission dismiss the Oppositions and reconsider the *MO&O* as set forth in the Petition and this Consolidated Reply.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I, James A. Barnett, Jr., do hereby certify that on this 5th day of July, 2016, I caused a copy of the foregoing Consolidated Reply of The Alliance of Automobile Manufacturers and Association of Global Automakers to be served by U.S. mail, postage pre-paid, on the following:

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